

T-111.2400 Basics of Digital Media

Exam 23.05.2011

Please, write the course name, date, and your name and student number in each answer paper. Maximum for each answer is six points..

1. Media Services

Define the following concepts:

1. Open Innovation
2. Long Tail of Content
3. Lock-in

2. Digital Rights Management

What's the purpose of the following DRM-techniques?

1. Access Control
2. Protected Sessions
3. Encryption
4. Tamper Resistance
5. Watermarking
6. Digital Fingerprints

3. Video

Are the following claims true or false? Right answer gives you +1 point, but false answer -1 point. Unanswered claim equals 0 points. Total points can be 0-6.

1. Interlacing reduces flickering
2. Television uses subtractive colour system
3. In Zig-zag order, the high frequencies are before low frequencies
4. Quantization can be used to adjust video compression ratio
5. Arithmetic coding is based on symbol tables
6. In colour television, video is broadcasted as RGB-signals

4. Graphics Architecture

What are the four phases of graphics pipeline and what happens in each stage?

5. XML

Tell briefly what are the following eXtensible Markup Languages (XML) and what are they used for.

1. XML Schema
2. XSL-T
3. XPath
4. XForms
5. XQuery
6. SMIL